

Application Number 10/529298
Response to the Office Action dated 01/23/2008

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REMARKS

Favorable reconsideration of this application is requested in view of the following remarks.

Applicants respectfully note that claim 11, which was added in the Preliminary Amendment filed on March 25, 2005, has not been considered by the Examiner in the Office Action of January 23, 2008. Accordingly, Applicants do not include comments on claim 11 in this response.

Claim 1-9 have been rejected under 35 U.S.C. 103(a) as being obvious over Kitaura et al (U.S. Patent No. 6,229,785) (Kitaura I). Applicants respectfully traverse this rejection.

Table 1 of Kitaura I discloses different oxygen atom concentrations in plural recording layers (see coln. 13, lines 23-48). However, in the reference, twenty (20) disks, each of which is a single plate, are formed in order to examine recording properties depending on different compositions of the recording layers (see coln. 13, lines 6-21), and the reference does not disclose that these disks with different compositions are layered into a recording medium having multiple information layers as required by claims 1, 5, 8, and 9. The reference simply prepares several samples having different concentrations of one or more parameters and compares the performance of these samples in order to find desirable parameters. As a result, the reference concludes that the desirable oxygen concentration is the range of 40 atom % - 60 atom % (see coln. 15, lines 29-34 and 54-59). The reference, in addition, fails to disclose or suggest (i) the oxygen atom concentration in the recording layer closest to a laser beam must be higher than that of one closer layer from the farthest layer relative to the beam ("(n-1) layer"), and (ii) the oxygen atom concentration in the closer layer relative to a laser beam needs to be equal to or higher than that of the next closer layer relative to the beam as required by claims 1 and 8. These properties of claims 1 and 8 provide more uniform reflectivity and recording sensitivity (see Tables 2 and 5). Moreover, the reference also does not disclose

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or suggest when the information recording medium has two recording layers, the oxygen atom concentration in the first layer must be higher than that of the second layer as claims 5 and 9 require. Therefore, claims 1-9 of the present invention are distinguished from the reference, and accordingly, the rejection should be withdrawn.

Claims 1-10 have been rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-30 of Kitaura et al (U.S. Patent No. 6,229,785) (Kitamura I). Applicants respectfully traverse this rejection.

Kitaura I claims the ranges of the oxygen atom concentration of 45 atom % - 60 atom % and 40 atom % - 60 atom % but fails to claim (i) the oxygen atom concentration in the recording layer closest to a laser beam must be higher than that of the (n-1) layer, (ii) the oxygen atom concentration in the closer layer relative to the laser beam needs to be equal to or higher than that of the next closer layer relative to the beam required by claims 1 and 8, and (iii) when the information recording medium has two recording layers, the oxygen atom concentration in the first layer must be higher than that of the second layer required by claims 5 and 9 (collectively, "a gradient of oxygen atom concentrations"). Therefore, Kitaura I is no more relevant for double patenting purposes than it is as a prior art reference. Therefore, claims 1-10 are distinguished from the claimed subject matter of Kitaura I for the reasons discussed above and this rejection should be withdrawn.

Claims 1-10 have been rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-21 of Kitaura et al (U.S. Patent No. 6,610,380) (Kitaura II). Applicants respectfully traverse this rejection. The application publication of the reference appears to be available as prior art.

Kitaura II discloses and claims the ranges of the oxygen atom concentration of 25 atom % - 60 atom % but fails to disclose, suggest or claim the gradient of oxygen atom concentrations in claims 1 and 8 and claims 5 and 9 (the properties (i)-(ii) and (iii) noted above), respectively. Although the reference discloses a relatively wide range of oxygen atom concentration, nothing suggests that any one particular product has concentrations

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across the range as claims 1, 5, 8, and 9 require; nor does it mean that more than one product having various concentrations across the range of the concentration must be prepared; but means that the product should have a concentration that is within the range. Indeed, the reference discloses only one oxygen concentration of 53 atom % in Example 1 and does not disclose the requirement of more than one layer having different concentrations (see coln. 11, lines 31-33) that claims 1, 5, 8, and 9 require. Therefore, the claimed subject matter of claims 1-10 of the present invention is distinguished from Kitaura II for reasons similar to those discussed above and the rejection should be withdrawn.

Claims 1-10 have been rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-21 of Kitaura et al (U.S. Patent No. 6,768,710) (Kitaura III). Applicants respectfully traverse this rejection. The application publication of the reference appears to be available as prior art.

Similar to Kitaura I and II, Kitaura III discloses and claims the ranges of the oxygen atom concentration of 25 atom % - 60 atom % but fails to claim or disclose or suggest the gradient of oxygen atom concentrations. Although the reference discloses a relatively wide range of oxygen atom concentration 25 - 60 atom % (see coln. 6, lines 7-23), nothing suggests that any one particular product has concentrations across the range as claims 1, 5, 8, and 9 require as discussed above; nor does it mean that more than one product having various concentrations across the range of the concentration must be prepared; but means that the product should have a concentration that is within the range. As in Kitaura II, Kitaura III discloses only one value of the oxygen atom concentration 53 atom % (see coln. 12, lines 64-67). Therefore, the claimed subject matter of claims 1-10 of the present invention is distinguished from Kitaura III for reasons similar to those discussed above and the rejection should be withdrawn.

Claims 1-10 have been provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 16-31 of copending

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Application No. 10/576278, Habuta et al. (U.S. Patent Application Publication No. 2007/0077521). Applicants respectfully traverse this rejection.

Habuta claims that oxygen is included in the information layer but fails to claim the gradient of oxygen atom concentrations. Although Habuta contemplates a relatively wide desirable range of oxygen atom concentration of 30-70 atom % (see para. 63), nothing suggests that any one particular product has concentrations across the range that claims 1, 5, 8, and 9 require as discussed above; nor does it mean that more than one product having various concentrations across the range; but means that the product should have a concentration that is within the range. Instead, Habuta discloses and claims a gradient of M atom concentrations such as palladium concentration (see paras. 24, 88, and 98) in order to obtain stable recording and reproduction and good recording sensitivity in the farthest layer relative to the laser beam (see paras. 88 and 98). Therefore, the claimed subject matter of claims 1-10 of the present invention is distinguished from Habuta for reasons similar to those discussed above and the rejection should be withdrawn.

In view of the above, Applicants request reconsideration of the application in the form of a Notice of Allowance.

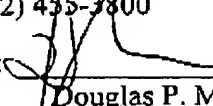


Dated: April 23, 2008

DPM/my/ad

Respectfully submitted,

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